

activated charcoal and at least one non-ionic exchange resin.

2. The toxin removal device according to claim 1 wherein said non-ionic exchange resin comprises a non-ionic aliphatic ester resin or a non-ionic polystyrene divinyl benzene resin.

3. The toxin removal device according to claim 2 wherein said non-ionic aliphatic ester resin has an average surface area of approximately 500 m²/g and an average pore size of approximately 450 Angstroms and a mean diameter of 560 µm.

4. The toxin removal device according to claim 3 wherein said non-ionic aliphatic ester resin is known commercially as AmberliteTM XAD-7HP.

5. The toxin removal device according to claim 4 wherein said non-ionic polystyrene divinyl benzene resin has an average surface area of approximately 700 m²/g with an average pore size of 300 Angstroms and a mean particle diameter from approximately 35 µM to approximately 120 µM.

6. The toxin removal device according to claim 5 wherein said non-ionic polystyrene divinyl benzene resin is known commercially as AmberchromTM GC 300C.

7. The toxin removal device according to claim 1 wherein said charcoal comprises uncoated coconut shell granule charcoal.

8. The toxin removal device according to claim 1 further comprising at least one particle filter downstream of said toxin removal device in said extracorporeal circuit.

9. A toxin removal device for use in an extracorporeal circuit comprising:

activated charcoal and a non-ionic exchange resin selected from the group consisting of non-ionic aliphatic ester resin or a non-ionic polystyrene divinyl benzene resin.

10. A toxin removal device for use in an extracorporeal circuit comprising:

activated charcoal and a non-ionic exchange resin, non-ionic aliphatic ester resin and a non-ionic polystyrene divinyl benzene resin.

11. The toxin removal device according to claim 9 or 10 wherein said non-ionic aliphatic ester resin has an average surface area of approximately 500 m²/g and an average pore size of approximately 450 Angstroms and a mean diameter of 560 µm.

12. The toxin removal device according to claim 11 wherein said non-ionic aliphatic ester resin is known commercially as Amberlite™ XAD-7HP.

13. The toxin removal device according to claim 11 wherein said non-ionic polystyrene divinyl benzene resin has an average surface area of approximately 700 m²/g with an average pore size of 300 Angstroms and a mean particle diameter from approximately 35 µM to approximately 120 µM.

14. The toxin removal device according to claim 9 or 10 wherein said charcoal comprises uncoated coconut shell granule charcoal.

15. An extracorporeal circuit for removing toxins from the blood comprising:

a plasma filter, an activated charcoal contained in a first housing and a second housing having at least one non-ionic resin disposed therein.

16. The extracorporeal circuit according to claim 15 wherein said at least one non-ionic resin is a non-ionic aliphatic ester resin or a non-ionic polystyrene divinyl benzene resin or a combination thereof.

17. A method for removing toxins from blood comprising:

circulating the venous blood of a patient through an extracorporeal circuit having a toxin removal device disposed therein wherein said toxin removal device comprises activated charcoal and at least one non-ionic resin.

18. The method for removing toxins from blood according to claim 17 wherein said venous blood is circulated through an extracorporeal circuit wherein said at least one non-ionic resin is non-ionic aliphatic ester resin or a non-ionic polystyrene divinyl benzene resin or a combination thereof.